

# If you gave me 60 hours

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In writing this, I have imagined that one of you has said to me: “You have 60 hours to prepare yourself for the Stage A examination.”

I would first draw material from the AFOEM training curriculum under the 28 topic headings that I have presented here. I would start with the first topic and allocate a period of time to study the items listed there. I would find 2 – 3 references that I would use for this journey.

- *If I were reasonably confident with the items in that topic*, I would start immediately to find and to respond to multiple choice questions on that topic. This would show me gaps in my knowledge of that topic and I would make a *limited* revision based on the gaps that I revealed in my knowledge.
- If I felt very uncertain about the items in the topic, I would start with a limited revision – for around half the time that I allocated to that topic. Then I would find and to respond to multiple choice questions on that topic

*Then comes the hardest part of all.* When the time I allocated to that topic expires, I would quickly note down or highlight up to five areas about which I was unsure and **move to the next topic**. *To do this requires very firm self-discipline.* It might be that some time in the following fortnight, I could find time to come back to check on the items about which I still had doubts – but it should **not** be at the expense of moving to another topic.

I shall now list the topics that I would study and the time I (personally) would allocate to each.

## 1 Pharmacotherapy [2 hours of study]

- Principles of absorption, distribution, metabolism and excretion of drugs (and toxins) including body compartments, volume of distribution, clearance, half-life, enzyme function, phase I and phase II metabolism.
- Role of liver and kidney, and conditions that favour accumulation and reduce excretion.
- Means of removal of insoluble inhaled foreign particles from the bronchial tree and the alveoli.
- Impact of organ dysfunction on pharmacokinetics and dose modification.
- Common presentations of drug-induced disease, adverse drug reactions.
- Actions and indications of anticoagulants both prophylactic and therapeutic.
- Actions and indications of corticosteroids.
- Classes of commonly available analgesics with respect to mode of action, pharmacokinetics, potency and efficacy in various pain syndromes.

## 2 Acutely ill and critically ill patients [1 hour of study]

- Indications, contraindications, side effects of anaesthesia and sedation.
- Clinical presentation, differential diagnosis, underlying pathophysiology, initial investigations, initial management, and likely complications of syncope, hyperthermia and hypothermia, extensive skin blistering or burns, electrocution and severe head injury.
- Describe the related pharmacology, clinical presentation and initial acute management of poisoning with paracetamol, ethanol, amphetamines, opioid drugs, benzodiazepines, anticholinesterases, carbon monoxide and iron.
- Procedures for the clinical management of individuals involved in chemical spills or other hazardous substances incidents. (Note: there are relatively few direct antidotes. Emergency care is usually directed at maintaining vital body functions.)

## 3 Cardiology [2 hours of study]

- Epidemiology, pathophysiology, clinical presentation, differential diagnosis, investigations, initial management, principles of ongoing management, potential complications of the disease and preventive strategies for acute coronary syndromes, chronic coronary artery disease, heart failure, arrhythmias, endocarditis, hypertension, deep vein thrombosis, pulmonary embolus, stroke and peripheral vascular disease.
- Clinical presentation and potential complications of valvular heart disease, pericardial disease and cardiovascular manifestations of systemic disease (e.g. diabetes, thyroid, renal).
- Common purposes of prescribing beta blockers, ACE inhibitors, calcium channel blockers, diuretics, nitrates, statins and fibrinolytic agents.

#### **4 Endocrinology [2 hours of study]**

- Clinical presentation, differential diagnosis, underlying pathophysiology, initial investigations, initial management, and likely complications of diabetes mellitus types I and II, hypoglycaemia, diabetic keto-acidosis, osteoporosis, obesity, hypothyroidism, hyperthyroidism, benign prostatic disease, and thyroid, adrenal and pituitary crises.
- Broad outline of carbohydrate and lipid metabolism.
- The common purposes of prescribing insulin and oral hypoglycaemic agents.

#### **5 Gastroenterology [2 hours of study]**

- Strategies to attain a healthy weight.
- Laboratory markers of hepatic and pancreatic function and malabsorption.
- Alcohol metabolism.
- Describe the clinical presentation, differential diagnosis, underlying pathophysiology, initial investigations, initial management of an acute abdomen and of vomiting.
- Pathophysiology, clinical presentation, differential diagnosis, investigations, initial management, principles of ongoing management, potential complications of the disease and its management, preventive strategies of gastrointestinal bleeding, gastro-oesophageal reflux, peptic ulcer, acute and chronic liver disease.
- Clinical presentation, initial investigations, initial management, potential complications, and therapeutic options for inguinal hernia, biliary obstruction, gallstones, acute pancreatitis, inflammatory bowel disease, irritable bowel syndrome, gastrointestinal malignancy, gastrointestinal manifestations of systemic disease (e.g. diabetes, cystic fibrosis).

#### **6 Haematology (non-malignant) [1 hour of study]**

- Coagulation,
- Haematopoiesis, iron, B12 and folate metabolism.
- Haemolysis.
- Principles of transfusion and bone marrow transplantation.
- Pathophysiology, clinical presentation, differential diagnosis, investigations, initial management, principles of ongoing management, potential complications of diseases causing anaemia and their management and preventive strategies.
- The common purposes of prescribing ferrous sulphate, folate and erythropoietin.

#### **7 Immunology [2 hours of study]**

- Nature of inflammation –acute, chronic.
- Healing and repair.
- Function of spleen, lymph nodes and other lymphoid tissue.
- Barriers to infection.
- Immune responses – innate and adaptive.
- Action of immunosuppressive agents.
- Allergic responses.
- Autoimmunity.
- Differential diagnosis, appropriate investigations and initial management for presentation with fatigue and lethargy.
- Clinical presentation, initial investigations, initial management, potential complications and disease associations, therapeutic options of allergic disorders (anaphylaxis, food allergy, adverse drug reactions, atopic dermatitis, urticaria), and acquired immunodeficiency syndromes (HIV, immunosuppressive drugs, post-transplantation).

*I realise that the field of immunology is complex but I would expect the examination to focus on common clinical situations and first-line methods of special investigation. As with my study of disorders in the other body systems, I would aim to know about the diagnosis and likely forms of management of common conditions.*

*Although I would expect only 2 – 3 questions to ‘scream out’ immunology, I would expect facts about the immune system to appear in questions on other body systems such as respiratory, endocrine, musculoskeletal, skin as well as in questions on infectious disease, neoplasia and preventive medicine. That’s why I would give it two hours of study.*

## **8 Psychological medicine [3 hours of study]**

- Neurotransmitters and their different influences on mental state.
- Principles of substance dependence (addiction) including neuroadaptation (tolerance) and withdrawal.
- Mode of action, adverse effects, interactions, pharmacokinetics of anti-psychotics, benzodiazepines, anti-depressants.
- Psychological impact of chronic conditions including risk factors for depression in a person with chronic illness.
- Clinical presentation, initial investigations, initial management, potential complications and disease associations, therapeutic options and adverse effects of disease management of mood disorders, anxiety disorders, psychosis, eating disorders, substance use disorders, somatoform disorder, suicidal behaviour and aggression.
- Pattern of use, clinical presentation of intoxication and withdrawal of alcohol, opioids, benzodiazepines, cocaine, cannabis, amphetamine-type stimulants, volatile solvents, nicotine, ketamine.
- Common purposes of prescribing methadone, naltrexone, buprenorphine and nicotine gum/patches.

## **9 Musculoskeletal conditions [5 hours of study]**

- Control of posture and movement.
- Functional anatomy of the bones and joints of the vertebral column in the cervical and lumbar region.
- Functional anatomy of the large joints of the upper and lower limbs.
- Functional anatomy of the wrist and hand including the nerves and arteries, the bones, joints, tendons, fascia and carpal tunnel.
- Outline knowledge of the bones of the skull, the thoracic wall, and the vertebrae of the thoracic, sacral and coccygeal region.
- Outline knowledge of the deeper muscles of the limbs and their nerve supply, and of the fascial compartments of the lower leg.
- Outline knowledge of the bones of the foot.
- Outline knowledge of the muscles of the neck and jaw.
- Bone and mineral metabolism.
- Principles of physical activity in disease prevention, maintenance of healthy weight in all age groups, and prevention of frailty in old age.
- Differential diagnosis, appropriate investigations and initial management for chronic pain.
- Non-pharmacological approaches to management of pain.
- Pathophysiology, clinical presentation, differential diagnosis, investigations, initial management, principles of ongoing management, potential complications of the disease and its management, preventive strategies for osteoarthritis, osteoporosis, soft tissue injury, gout and pseudogout, rheumatoid arthritis, myopathies, systemic lupus erythematosus, fibromyalgia, common fractures, common dislocations, musculoskeletal manifestations of systemic and chronic disease, musculoskeletal manifestations of infectious disease, musculoskeletal manifestations of renal disease.
- Clinical presentation, differential diagnosis, underlying pathophysiology, initial investigations, initial management, and likely complications of a single, hot, swollen joint.
- X-ray appearance of gross lesions of the skull, the vertebral column, and large joints of the limbs.

## **10 Neurology [4 hours of study]**

- Cranial, cervical, lumbar and sacral dermatomes.
- Site and content of the cauda equina in the lumbar region.
- Position of the major tracts of the spinal cord and hence the effect of spinal cord injury.
- Function of the cranial nerves
- Outline of the structure and function of the autonomic nervous system.
- Outline of the major lobes of the cerebral hemispheres.
- Outline of the cerebellum, the basal ganglia and the nuclei and pathways of the brainstem.
- Outline of the blood supply to the various parts of the brain.
- Outline of the meninges and the circulation and physiology of the cerebrospinal fluid.
- Neurotransmitters and neurotransmission (including the autonomic nervous system).
- Sleep-wake regulation.

*continued....*

## 10 Neurology (ctd.)

- Roles of the peripheral nervous system with emphasis on pain pathways.
- Basis of taste and smell.
- Broad understanding of the central regulation of visceral function including hunger, thirst, temperature.
- Clinical presentation, initial investigations, initial management, potential complications and therapeutic options for epilepsy, migraine, peripheral neuropathy, Parkinson's disease, Guillain Barre syndrome, multiple sclerosis, motor neurone disease.
- Describe the clinical presentation, differential diagnosis, underlying pathophysiology, initial investigations, initial management, and likely complications of impaired consciousness, acute agitation or delirium, seizures, and severe headache.

*I would expect to have to interpret the report of an imaging study or a nerve conduction study and to integrate this with other clinical findings. I would seek to know about the diagnosis and likely forms of management of common conditions.*

## 11 Renal and genitourinary medicine [1 hour of study]

- Describe the clinical presentation, differential diagnosis, underlying pathophysiology, initial investigations, initial management, and likely complications of severe acid base and electrolyte disturbances.
- Differential diagnosis, appropriate investigations and initial management for presentation with haematuria.
- Clinical presentation, initial investigations, initial management, potential complications, therapeutic options of acute and chronic renal failure, acute tubular necrosis, diabetic nephropathy, obstructive uropathy, drug-related nephrotoxicity, renal hypertension, glomerulonephritis.

## 12 Respiratory and sleep medicine [3 hours of study]

- Anatomy of the lungs, their lobes, the airways, the pulmonary blood supply.
- Functional anatomy of the pharynx, larynx and epiglottis.
- Position of the nasal sinuses and the overlying superficial structures of the face.
- Gas exchange.
- Gas transport in the blood and the effects of anaemia and high altitude.
- Mechanics of ventilation, spirometry and the various lung volumes.
- Ventilation perfusion matching – the  $\dot{V}/Q$  ratio.
- Acid-base balance.
- Respiratory responses to exercise and to hypoxia and hypercapnia.
- Applied respiratory physiology – to interpret basic pulmonary function tests.
- Means of removal of insoluble inhaled foreign particles from the bronchial tree and the alveoli.
- Inflammation of airways.
- Pathophysiology, clinical presentation, differential diagnosis, investigations, detailed initial management, principles of ongoing management, potential complications of the disease, preventive strategies for asthma, chronic obstructive pulmonary disease, pneumonia, acute and chronic respiratory failure, pulmonary embolus, pleural effusion.
- Clinical presentation, initial investigations, initial management, potential complications, therapeutic options pneumothorax, pulmonary hypertension, diffuse lung disease, sleep apnoea, cystic fibrosis, bronchiectasis, hypersensitivity pneumonitis.
- Principles of continuous positive airway pressure (CPAP) and bi-level positive airway pressure (BiPAP).
- The common purposes of prescribing bronchodilators and antihistamines.
- Differential diagnosis, appropriate investigations and initial management for presentation with dyspnoea or haemoptysis.

## 13 Skin disorders [3 hours of study]

- Structure and function of skin, hair and nails.
- Pigmentary, inflammatory, immune responses of the skin.
- Changes in skin due to ageing and sustained exposure to ultraviolet.
- Venous drainage of the lower limbs.
- Pathophysiology, clinical presentation, differential diagnosis, investigations, for drug eruptions and cellulitis.

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### **13 Skin disorders (ctd.)**

- Clinical presentation, initial investigations, initial management, potential complications, therapeutic options, adverse effects of disease management of squamous cell carcinoma, basal cell carcinoma and malignant melanoma, acne, rosacea, solar keratoses, urticaria, contact dermatitis, psoriasis, non-healing ulcers and wounds, nodular skin lesions, naevi, bacterial and fungal infections, viral exanthems, scabies, head lice, common disorders of the nails and hair, skin manifestations of systemic disease.
- The common purposes of prescribing emollient skin preparations, topical corticosteroids, topical antifungals.

### **14 Eye conditions [2 hours of study]**

- the orbit and its contents, the appearance of the fundus, the path of the optic nerve to the visual cortex, and the cell types of the retina.
- the pituitary gland and its relations to major arteries and the optic nerve.
- functions of the several parts of the visual pathway.
- common variations in colour vision;
- pathophysiology of visual field defects.
- Clinical presentation, initial investigations, initial management, potential complications and disease associations, therapeutic options of common causes of eye trauma, common medical conditions of the eyeball such as conjunctivitis, cataract, glaucoma, and common conditions of the adnexae such as dry eye.
- Describe the clinical presentation, differential diagnosis, underlying pathophysiology, initial investigations, initial management, and likely complications of acute visual loss and painful red eye.
- The common purposes of prescribing mydriatics and ocular lubricants.

### **15 Ear conditions [2 hours of study]**

- The cavities that house the various parts of the ear and their contents, and the neurosensory structure of the ear and vestibular apparatus.
- Perception of speech by a combination of auditory function, visual cues and anticipation of the words likely to be uttered.
- Describe the clinical presentation, differential diagnosis, underlying pathophysiology, initial investigations, initial management, and likely complications of acute hearing loss.
- Clinical presentation, initial investigations, initial management, potential complications and disease associations, therapeutic options of inflammation of the ear canal, perforation of the tympanic membrane, disease of the middle ear including otitis media, 'glue ear' and otosclerosis, Meniere's disease, noise-induced hearing loss, tinnitus, vertigo and cochlear dysfunction.

### **16 Neoplasia [2 hours of study]**

- Cell growth and ageing, cell injury, apoptosis.
- Pathogenesis of malignant neoplasm and metastatic spread.
- Principles of staging.
- Broad pharmacological principles of chemotherapy, radiotherapy and immunotherapy.
- Screening tests.
- Differential diagnosis, appropriate investigations and initial management for presentation with weight loss.
- Risk factors, clinical presentation, natural history, broad therapeutic options and preventive strategies including screening for malignant neoplasms of lung, breast, gastrointestinal, prostate, brain, lymphoma, multiple myeloma, leukaemia, neoplasms recognised as related to occupation.
- Clinical presentation, initial investigations, initial management, potential complications, therapeutic options of renal carcinoma and genitourinary malignancies (prostate, testicular bladder, uterine/ cervical/ ovarian).
- Management of acute complications of cancer – uncontrolled pain, malignant hypercalcaemia, spinal cord compression, superior vena caval obstruction, pericardial tamponade.
- Management of bone marrow suppression, neutropenic sepsis.

*I would not seek to have detailed knowledge of the ever-changing schedules of chemotherapy or radiotherapy, but to understand the purpose of therapy at different stages of neoplastic disease and to be aware of the effects of cancer, its therapy and its emotional effects on patients and those close to patients.*

## 17 Genetic conditions [1 hour of study]

- Definitions of polymorphism, mutation, genetic segregation analysis, sex linked, multifactorial and polygenic inheritance.
- Major cancer genetics.
- Basic principles of individualised medicine and pharmacogenetics.
- Genetic testing techniques: polymerase chain reaction (PCR), gene sequencing.
- Implications to individual of a genetic diagnosis (e.g. life insurance).
- Implications to family of a genetic diagnosis.
- The inheritance, phenotype(s), clinical presentation, natural history, complications and co-morbidities, principles of ongoing management of cystic fibrosis, otosclerosis, familial neoplasia.

## 18 Infections [2 hours of study]

- Biology of common and important pathogens.
- Host response to infection.
- Principles of infection control.
- Pathophysiology, clinical presentation, differential diagnosis, investigations, initial management, principles of ongoing management, potential complications of the disease and its management, preventive strategies of pneumonia/lower respiratory tract infections including influenza and *Legionella* infection, meningitis/encephalitis, upper respiratory tract infections including otitis media and tonsillitis, urinary tract infection, infective endocarditis, cellulitis, septicaemia/bacteraemia, influenza and pandemics.
- Clinical presentation, initial investigations, initial management, potential complications and disease associations, therapeutic options of osteomyelitis, septic arthritis, exanthemata, e.g. varicella, tuberculosis, CoViD-19, human immunodeficiency virus (HIV), hepatitis viruses, Epstein-Barr virus, fever in the returning traveller including malaria, dengue fever, parasitic infections, cytomegalovirus and toxoplasmosis, meningococcaemia, common sexually transmitted diseases, infections in the immunocompromised host, diseases well-recognised as transmitted from animals and birds in Australia and New Zealand, water-borne and food-borne gastro-intestinal disease;
- Differential diagnosis, appropriate investigations and initial management for presentation with fever / PUO / night sweats.
- Mode of action, antimicrobial spectrum, adverse effects of common classes of antimicrobials.

## 19 Reproduction, pregnancy, menopause [2 hours of study]

### *Pregnancy*

- Physiological changes associated with normal pregnancy and lactation.
- Changes in pharmacokinetics with normal pregnancy.
- Mechanisms of teratogenesis and other adverse reproductive outcomes (drugs, infections, radiation, pre-pregnancy lifestyle issues) and prevention.
- Post-chickenpox exposure management.
- Physiology of spermatogenesis.
- Risk factors for common pregnancy associated diseases – hypertension, diabetes, thromboembolism.
- Natural history, presentations, differential diagnosis, initial investigations, diagnostic criteria, emergency management of pre-eclampsia/eclampsia.
- Risks associated with various investigative procedures particularly imaging during pregnancy.
- Usual investigation and management of infertility.
- Pharmacotherapeutics in pregnancy.

### *Menopause*

- Physiological changes associated with peri-menopause and post-menopausal period;
- Clinical presentation of menopause.
- Risk factors for disease in postmenopausal female.
- Osteoporosis/osteopenia.
- Cardiovascular disease.
- Neoplasia.
- Incontinence.
- Depression.

## 20 Ageing [1 hour of study]

- Physiology of ageing- pharmacology, changes associated with ageing in major organ systems.
- Cellular ageing, tissue growth and repair.
- Non-specific presentation of illness in the elderly.
- Clinical presentation, differential diagnosis, investigations, detailed initial management, principles of ongoing management, preventive strategies of polypharmacy and adverse drug reactions, falls, cognitive decline, functional decline.

## 21 Basic sciences [4 hours of study]

- The physical properties of sound, excessive heat, severe cold, sudden and sustained changes to ambient pressure, ultraviolet radiation, ionising radiation and radioactive particles.
- Some features of substances:
  - a gas and the physical laws that relate to gases;
  - a volatile organic compound;
  - aromatic and aliphatic compounds;
  - an ion and a polar molecule;
  - electrolysis and electrolytes;
  - an acid, an alkali,  $pK_a$  and pH;
  - a metal and a heavy metal;
  - a halogen and a halogenated organic compound;
  - an enzyme and its properties;
  - an inert gas;
  - nanoparticles;
  - oxidation and reduction;
  - diffusion and osmosis;
  - flammability and explosion;
  - solubility;
  - odour threshold
- Distinguishing features of prions, viruses, bacteria, fungi and protozoa, e.g. ability to multiply outside the body or life cycle that involves other hosts. I would learn about these different biological agents with that in mind, not worry about detailed microscopic structure or staining techniques.
- Clinical presentation and initial acute management of poisoning with venom, e.g. snakes, spiders, jellyfish, wasps.

*There are notes and multiple-choice questions on basic science which have been distributed. I would start with those.*

## 22 Epidemiology and statistics [6 hours of study]

- Advantages and disadvantages of different study methodologies (e.g. case-control studies, cohort studies, randomised controlled trials).
- The particular limitations of ecological, cross-sectional, case-control and cohort studies.
- Nature of bias and confounding.
- Criteria of causation.
- Processes of diagnostic reasoning including its probabilistic nature.
- Concepts of natural history of disease, absolute risk, attributable risk.
- Potential biases affecting the ability of cohort studies and case-control studies to define the future risk of events.
- Potential biases affecting the validity of clinical trials.
- Concepts of relative risk reduction (RRR), absolute risk reduction (ARR), odds ratio (OR), number needed to treat (NNT), number needed to harm (NNH).
- Distinguish screening tests from diagnostic tests in regard to purpose.
- Means of assessing the performance of a test (e.g. sensitivity, specificity, positive predictive value, likelihood ratios).
- The meaning of normal values, how these are determined, and what constitutes normality in a particular context.
- Strength of evidence in epidemiology, e.g. case reports, ecological studies, clinical trials, systematic reviews.

*continued....*

## 22 Epidemiology and statistics (ctd.)

*Regarding the economic evaluation of a form of medical intervention*

- Methods and terminology of economic evaluation.
- Sources of direct cost – labour, supplies, overheads.
- Sources of indirect cost – time and travel, treatment of side-effects.
- QALYs and their range of values.
- Economic evaluation ratio = incremental costs / incremental benefits.

*Notes on epidemiology have been distributed and there are College tutorials. I would start with those.*

## 23 Communication [1 hour of study]

*Much of my own knowledge of this will have come from my day-to-day interactions with people. Hence, I would allow only an hour in order to fill gaps from 2 – 3 of the points listed here.*

- Relevant cultural practices, e.g. importance of involving extended family for indigenous people.
- Demonstrate in clinical interactions a manner that welcomes and enables a patient from a different cultural background to speak of his or her background, previous experiences of medical treatment, use of alternative therapies, spiritual beliefs relating to illness, people close to the patient who assist the making of health care decisions, and the meaning of the illness to the patient. And demonstrate discretion to the extent of knowing that a level of trust must be established over time before some important matters can be broached.
- Taking account of what your patient is already likely to know (or not know) about the subject at hand.
- How to identify and manage communication barriers with patients who:
  - present at the request of a third party
  - speak a different language
  - have visual or hearing impairments
  - have a learning disability
  - have poor literacy or numeracy
  - have poor health literacy
- Know how, when and what to communicate in written and verbal formats with relevant employers, return to work co-ordinators and insurers.
- Components of an effective referral letter – requires anticipation and understanding of what another health professional needs to know in order to be effective in their part of a person's care.
- Communication factors affecting continuity of care of a patient by other health care workers within or associated with your practice.
- Discern what health administrators or insurers want to know and what they have a right to know. Particularly sensitive issues for health administrators will be events that will cost a lot of money, that may require significant re-allocation of staff, or that could be publicly embarrassing if not dealt with in a timely way. Administrators can handle bad news but are likely to be testy if faced with nasty surprises that others have observed to be occurring but have failed to communicate.
- In planning to direct a patient down a particular path of care, be reasonably aware of the implications of this in terms of likely cost, duration, the capacity of the patient (and others close who are likely to be involved) to adhere to what is involved.
- The special reporting requirements of a medical examination performed on behalf of a third party.

## 24 Ethics [2 hours of study]

- The bioethical principles of justice, autonomy, beneficence, non-maleficence.
- Duty of care, i.e. obligation to ensure the safety or well-being of others.
- Principles of informed consent and documentation of consent. The obtaining of consent from patients to share information with significant others is particularly important in occupational medicine where third-party involvement is common.
- Appropriate response if a patient withdraws consent.
- Privacy and confidentiality in the physician-patient relationship.
- The patient's right to make their own decisions, and their rights regarding refusal of treatment/procedures.
- Legal issues relating to mental illness, driving and medical risk and communicable diseases.

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## **24 Ethics (ctd.)**

- Patient's right to be given accurate, appropriate, unbiased information about the risks and benefits of test and treatment options.
- Legal, policy and ethical considerations in communicating about a patient with other members of your health care team.
- Manage the ethical issues of the two roles of communication with patient and communication with external agencies.
- What you do if you inadvertently create an ethical breach, e.g. send test results to the wrong patient.
- Limits of your role as a doctor in a particular situation. Although comprehensive care for an individual patient may be linked to a broader public health issue, be aware that taking on two roles may have ethical implications. You should be clear in your own mind the fair limits of what (if anything) you should communicate to an insurer, a patient support group, a lawyer, a social security organisation. It can be unhelpful to your patient to be too parsimonious, but it can be unethical to extend communication with such third parties beyond what is needed for the purpose at hand. Examples of where this caution may be relevant are rules for notification of driving capacity or obligations of doctors under injury compensation law.
- Approaches for dealing with ethical conflict at various levels – physician-patient, inter-professional, and associated with your own contribution to the work of an organisation. One area particularly relevant to occupational medicine is the extent to which you turn a 'blind eye' to a problem in a workplace that is not your reason for being there but which you have observed and which you believe will increase the risk of harm to those who work there, e.g. failure of individual workers to wear personal protective equipment to reduce exposure to atmospheric pollutants or noise.

## **25 Behavioural problems related to work [1 hour of study]**

- Handling violent behaviour or stalking from patients.
- Personality disorders in team leaders.
- Rules regarding bullying, harassment and violence in a workplace.
- Factors that may adversely affect the work environment, e.g. undue stress, systems, procedures, processes, access to training.

*Some notes on behaviour problems at work have been distributed.*

## **26 Human error and risk [1 hour of study]**

- Potential effect of medication on your patient and the safety of those with whom your patient works.
- Factors that contribute to adverse events including system, environmental, situational and professional factors.
- Basics of quality improvement.
- Process for risk assessment.
- Risks and hazards associated with the use of various investigations; e.g. ionising radiation, radio isotopes, and invasive investigations.
- Common hazardous exposures in medical practice – micro-organisms in exhaled air, body fluids and sharps.
- Hazards from handling of therapeutic agents, e.g. cytotoxic drugs.
- Electrical hazards and minimisation of risk.
- Radiation hazards and minimisation of risk.
- Fatigue.

## **27 Leadership and teamwork [1 hour of study]**

- Qualities of a good team leader in a healthcare setting.
- Effective time and stress-management techniques.
- Likely effects on professional teams of a member's anxiety state, depression and other psychiatric condition.
- Likely effects on professional teams of a member's degenerative disease that affects alertness, memory, reasoning, vision, hearing, balance, mobility, fine motor skills of the hands, and stamina.
- Presenteeism – risk to others of personal infection, including the carrier state.

## **28 Preventive medicine [1 hour of study]**

- Principles of prevention (1°, 2°, 3° prevention) and screening.
- Current screening guidelines for common diseases.
- Current indications for immunisation in adults.
- Principles of healthy diet across all age ranges including adolescence, pregnancy, lactation and old age.
- Techniques of proven value in smoking cessation and health benefits of smoking cessation including understanding of cycle of readiness for change in long-term habits.
- National Health Priority Areas (and risk factors) in Australia and New Zealand.
- Principles of control of an epidemic of infectious disease.
- Population groups with particular health needs, e.g. refugees, aged, rural/remote communities.
- Population characteristics that lead to inequality in health status, e.g. age, socio-economic status, geography, disability, gender, culture including reasons for health outcomes among Maori and Pacific Peoples and Aboriginal/Torres Strait Islander groups being worse than those among other minority groups with comparable socio-economic status.
- Measures of cost effectiveness and anticipated positive health outcomes.